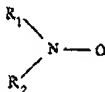


In the Claims:

Claim 1 (Currently Amended). A process for depositing thin layers by chemical vapor deposition, which comprises:

adding to a gas stream including materials to be deposited an effective amount of nitroxyl radicals of the formula



the R_1 and R_2 being selected from the group consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 2 (Original). The process according to claim 1, wherein R_1 and R_2 are identical.

Claim 3 (Original). The process according to claim 1, wherein R_1 and R_2 are different.

Claim 4 (Original). The process according to claim 1, which further comprises including heteroatoms in the group consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 5 (Original). The process according to claim 1, which further comprises not including heteroatoms in the group

consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 6 (Original). The process according to claim 1, which further comprises:

forming from R_1 and R_2 a structure $-CR_3R_4-CR_5R_6-CR_7R_8-CR_9R_{10}-CR_{11}R_{12}-$;

wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are selected from the group consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 7 (Original). The process according to claim 6, wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are identical.

Claim 8 (Original). The process according to claim 6, wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are different.

Claim 9 (Original). The process according to claim 6, which further comprises including heteroatoms in the group consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 10 (Original). The process according to claim 6, which further comprises not including heteroatoms in the group

consisting of alkyl, alkenyl, alkynyl, acyl, and aryl radicals.

Claim 11 (Original). The process according to claim 1, which further comprises forming from R_1 and R_2 a structure $-\text{CR}_3\text{R}_4-\text{CR}_5\text{R}_6-\text{CR}_7\text{R}_8-\text{CR}_9\text{R}_{10}-\text{CR}_{11}\text{R}_{12}-$; wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are selected from the group consisting of hydrogen, methyl, and ethyl.

Claim 12 (Original). The process according to claim 11, wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are identical.

Claim 13 (Original). The process according to claim 11, wherein $R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}$ are different.

Claim 14 (Original). The process according to claim 1, which further comprises forming from R_1 and R_2 a structure $-\text{CR}_3\text{R}_4-\text{CR}_5\text{R}_6-\text{CR}_7\text{R}_8-\text{CR}_9\text{R}_{10}-\text{CR}_{11}\text{R}_{12}-$; wherein R_3, R_4, R_{11}, R_{12} are each methyl, and R_5, R_6, R_7, R_8, R_9 , and R_{10} are each hydrogen.

Claim 15 (Original). The process according to claim 1, wherein at least one of the materials to be deposited is a dielectric.

Claim 16 (Original). The process according to claim 15, wherein the dielectric to be deposited is selected from the

group consisting of silicon dioxide, silicon nitride, aluminum oxide, tantalum oxide, and a mixture thereof.

Claim 17 (Original). The process according to claim 1, wherein at least one of the materials to be deposited is a metal alloy.

Claim 18 (Original). The process according to claim 17, wherein the metal alloy is a mixture of metals selected from the group consisting of tungsten, cobalt, and tantalum.

Claim 19 (Original). The process according to claim 1, wherein at least one of the materials to be deposited is a metal.

Claim 20 (Original). The process according to claim 18, wherein the metal is selected from the group consisting of tungsten, cobalt, and tantalum.

Claim 21 (Original). The process according to claim 1, wherein at least one of the materials to be deposited is a metal-containing compound.

Claim 22 (Currently Amended). The process according to claim 22 21, wherein said metal-containing compound is selected from the group consisting of a metal nitride and a metal silicide.

Claim 23 (Original). The process according to claim 21, wherein said metal containing compound is selected from the group consisting of WN, WSi_x, CoSi, TaSi, and a mixture thereof.

Claim 24 (Original). The process according to claim 1, wherein only one chemical compound apart from the added nitroxyl radicals is present in the gas stream including the materials to be deposited.

Claim 25 (Original). The process according to claim 1, which further comprises heating to a temperature between 100°C and 500°C.

Claim 26 (Original). The process as claimed in claim 1, which further comprises heating to a temperature between 150°C and 250°C.

Claim 27 (Original). The process according to claim 1, which further comprises adding the nitroxyl radicals to the gas mixture in a concentration of less than five percent (< 5%).

Claim 28 (Original). The process according to claim 27, which further comprises adding the nitroxyl radicals to the gas mixture in a concentration of less than one percent (< 1%).

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Claim 29 (Original). The process according to claim 1, which further comprises adding the nitroxyl radicals the gas mixture only at the beginning of the deposition process.

Claim 30 (Original). The process according to claim 29, which further comprises adding the nitroxyl radicals to the gas mixture only for a period from five to twenty seconds (5-20 sec.) at the beginning of the deposition process.

Claim 31 (Original). The process according to claim 1, which further comprises alternatively adding the nitroxyl radicals to the gas mixture for a particular time and then not adding the nitroxyl radicals for a particular time during the deposition process.

Claim 32 (Original). The process according to claim 1, which further comprises continuously adding the nitroxyl radicals to the gas mixture during the entire deposition process.